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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,816	04/21/2004	Johann Guy Gaboriau	1480-CA (291US)	7272

7590 01/04/2007  
Thompson & Knight LLP  
Suite 3300  
1700 Pacific Avenue  
Dallas, TX 75201-4693

EXAMINER
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BOCURE, TESFALDET

ART UNIT	PAPER NUMBER
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2611

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/04/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/828,816

Applicant(s)

GABORIAU ET AL.

Examiner

Tessfaldet Bocure

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-25 is/are allowed.
- 6) ☐ Claim(s) 1 and 4-11 is/are rejected.
- 7) ☐ Claim(s) 2,3 and 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 1-6 are objected to because of the following informalities:

The claimed "another pulse modulated data stream" in claim 1 should be clearly recited as generated in response the input data stream.

Claims 2-7 are inherently rejected as being dependent on the rejected base claim.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 4-7 and 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Lin et al., Lin hereinafter (US patent number 6,501,234).

Lin teaches a Pulse Width Modulator (PWM hereinafter) for generating a plurality of PWM signal (fig.2) comprising: PWM signal generator (12) for generating a PWM data stream; delay generator (52) for generating a plurality of PWM delayed data streams, selected according to the programmable selection signal (see selection circuit as in claims 4,5,9 and 11); and the delay PWM data streams for driving a respective load (LOAD 1—LOAD n) as in claim 1 and 8.

Further Lin also teaches that the clock signal generator 15 for driving the PWM and the delayed PWM data streams as in claims 6,9 and 10 and the delay circuit 52 being within the element the PWM generator is located (element 10) and reads on the claimed integral part of the PWM stage as in claim 7.

***Allowable Subject Matter***

4. Claims 13-25 are allowed.
5. The following is a statement of reasons for the indication of allowable subject matter: The claimed subject matter in claims 13-25 is allowable because the arts of record fail to teach or fairly suggest the claimed "An audio circuit (claimed pulse-width modulation state for driving a full load in claim 21) comprising: a delay circuit for delaying a selected one of the pulse width modulated data stream and the another pulse width modulated data stream such that edges of the pulse width modulated data stream at the first node are temporally spaced from corresponding edges of the inverse (see inverter 504 in fig. 5) of the pulse width modulated data stream at the second node, in combination with the claimed PWM engine and first and second driver in claim 13; an inverter for inverting the second pulse width modulated data stream; a delay stage for delaying by a selected amount an inverted second pulse width modulated data stream output from the inverter, a delayed inverted second pulse-width modulated data stream output from the delay stage for driving a second terminal of the full-bridge load; and in combination with the claimed first and second path" in claim 21.

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US patent publication number 2003/0071586 issued to Lin et al. Discloses a PWM data stream generator for driving a plurality of loads. .


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tesfaldet Bocure whose telephone number is (571) 272-3015. The examiner can normally be reached on Mon-Thur (7:30a-5:00p) & Mon.-Fri (7:30a-5:00p).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jayanti (Jay) Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2611

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tesfaldet Bocure  
Primary Examiner  
Art Unit 2611

A handwritten signature in black ink, appearing to read 'Tesfaldet Bocure', is written over the printed name and title.

T.Bocure